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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,491	09/29/2004	Shinya Hasegawa	43888-339	5359
	7590 04/04/200 WILL & EMERY LL		EXAM	INER
600 13TH STR	•		GROUP, KARL E	
WASHINGTON, DC 20005-3096			ART UNIT	PAPER NUMBER
			1755	·
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVER	Y MODE
3 MONTHS		04/04/2007	PAI	PER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Eatherstore of the many by available intender the provisions of 30°CR1-130°B, in or event, now-ver, may a reply be timely field If NO period for reply is specified above, the maximum standors period will apply and will expire SIX (8) MONTHS from the maling date of this communication. Fallus to reply which the set or centered period for reply via specified above, the maximum standors period will apply and will expire SIX (8) MONTHS from the maling date of this communication. Fallus to reply which the set or centered period for reply via which the set or centered patient term adjustment. Set of PR 1-760°B. Fallus to reply which the set or exercised period for reply via produce and period of the communication. Status Status Status 1) Responsive to communication(s) filed on			
Examiner Kaft E. Group 1755	· .	Application No.	Applicant(s)
Laboration Lab	Office Action Summan		HASEGAWA ET AL.
- The MALIND DATE of this communication appears on the cover sheet with the correspondence address - Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Elementor for time may be availated under the provisors of 3 CFR 1.13(8), in or went, however, may a sety be finely filled to the provision of the provision of 3 CFR 1.13(8), in or went, however, may a sety be finely filled to the provision of 1 CFR 1.73(8). The provision of 1 CFR 1.73(8) is a communication, a period date of this communication. Feature to reply superfined above, the maximum statutory period will apply and will again a significant state of this communication. Feature to reply with the set or cented period for ingly with the set or cented period for all of the set of the provision of the provision of the provision of the set of the communication of the provision of the mailing date of this communication, even it smoly filed, may reduce any search patent term explainment. Sea 3 °CFR 1.73(8). Status 1) Responsive to communication(s) filled on	Onice Action Summary	Examiner	Art Unit
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This action is FINAL. 2b) This action is non-final. 3i Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims All States Claim(s) 1-25 is/are pending in the application. 42 Of the above claim(s) is/are withdrawn from consideration. 43 Of the above claim(s) is/are allowed. 6 Claim(s) 1-25 is/are rejected. 6 Claim(s) 1-25 is/are objected to. 6 Claim(s) 7-25 is/are objected to. 6 Claim(s) 2-25 is/are objected to. 6 Claim(s) 3 2-25 is/are objected to. 6 Claim(s) 3 2-25 is/are objected to. 6 Claim(s) 3 2-25 is/are objected to by the Examiner. 7 The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12 Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of . Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the international Bureau (PCT Rule 17.2(a)). See the attached detailed Office action for a list of the certified copies not received.	 WHICHEVER IS LONGER, FROM THE MAILING I Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mail 	DATE OF THIS COMMUNI .136(a). In no event, however, may a d will apply and will expire SIX (6) MO tte. cause the application to become A	CATION. reply be timely filed NTHS from the mailing date of this communication. BANDONED (35 U.S.C. & 133).
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		6) Other:	

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Claim Objections

1. Claims 7-25 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim may not depend upon a multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 7-25 have not been further treated on the merits.

Applicants should note in computing the proper claim fees:

For the purpose of computing fees, a multiple dependent claims referred to in section 112 of this title or any claim depending therefrom shall be considered as separate dependent claims in accordance with the number of claims to which reference is made.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1,5,6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Usui et al (5,733,828).

Usui et al teach a glass composition including:

Bi ₂ O ₃	77-95 wt%
MgO+ZnO	1-20
B_2O_3	2-10
SiO ₂	0-1
CeO ₂	0-10.

The claims are considered anticipated or in the alternative the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time of the invention to have selected the overlapping portion of the range disclosed by the prior art because overlapping ranges have been held to be a prima facie case of obvious, see In re Malagari, 182 U.S.P.Q 549.

5. Claims 1,2,5,6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sakoske (6,255,239).

2.

Sakoske teaches a glass composition including:

Bi ₂ O ₃	50-90 wt%
ZnO	0-9
B ₂ O ₃	2-9
SiO ₂	5-20
CeO	0-10
Al_2O_3	.1-10, see table in column

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The cerium oxide component, CeO is considered equivalent to CeO₂ once in the form of a glass.

The claims are considered anticipated or in the alternative the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time of the invention to have selected the overlapping portion of the range disclosed by the prior art because overlapping ranges have been held to be a prima facie case of obvious, see In re Malagari, 182 U.S.P.Q 549.

6. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al (6,778,355) further in view of Yamamoto et al (6,503,858).

Hasegawa et al teach a glass composition used in magnetic heads, including:

Bi ₂ O ₃	55-90 wt%	
ZnO	4-22	
B_2O_3	3-15	
SiO ₂	.5-14	
Al ₂ O ₃	0-4, see column 3, lines 12-20.	Hasegawa et al fail

to teach the oxide of Group C which is required by the instant claims in an amount of .1-10 wt%.

Yamamoto et al teach a glass composition to be used in applications such as magnetic heads wherein an oxide such as Ln₂O₃ (Ln being Pr, Nd, Sm,Eu, etc.) is added to increase flowability, deaeration and mechanical strength, column 7, lines 19-26).

It would have been obvious to one of ordinary skill in the art at the time of the invention to further included the Ln oxide in the composition of Hasegawa et al, because

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Yamamoto et al teach such an inclusion improves flowability, deaeration and mechanical strength of the glass composition.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl E. Group whose telephone number is 571-272-1368. The examiner can normally be reached on M-F (6:30-4:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kari E Group Primary Examiner Art Unit 1755

Keg 3-16-07